

Test Matrix

A total of 42 tests were performed with the different piles and bearing pad types utilized in the study. Each concrete pile was subjected to three different levels of axial load ratio (ALR). The H-Pile was not loaded axially due to the insensitivity of steel stiffness to axial loads. In addition, for each ALR, the axial load on the bearing pads was varied to three levels (P1, P2, P3). Testing was performed for each bearing pad/pile combination. Lateral load was applied to the test samples until the yield displacement of the pile, and in some of the cases in the inelastic range (the starred cases in Figure 60). The lateral loading scheme is explained in detail in the next section.